

BIG TIMBER DIVISION

1980

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I. GENERAL

A. Introduction

The Big Timber Division of the refuge is a unique and interesting area of wooded sloughs and tall timber. The entire unit is located on the river side of the main levee thus subjecting it to frequent flooding in a near normal river bottom situation. Total acreage is 1,757 of which approximately 70% is woodland, 28% open water, and 2% cropland. The unit has excellent stands of river bottom timber which includes Burr Oak, Kentucky Coffee Bean Tree, Native Pecan, Pin Oak, Shagbark/Shellbark Hickory, and Silver Maple. The entire unit is open to public use activities and is a very popular area for fishing and hunting.

Turkey and Otter Islands are included under the Big Timber Division for management purposes. Both these islands are located in the river just off the southeast corner of the Louisa Division. Little management occurs on these areas which are posted and patrolled by refuge staff mostly during hunting seasons.

B. Climatic and Habitat Conditions

Interior ice broke up by the 12th of March, which is near normal for this area. Low river water levels gave an early start to good stands of Rice Cutgrass and Wild Millet. The Coolegar Slough and other main water bodies produced excellent stands of Sago and Curly Leaf Pondweed.

C. Land Acquisition

Nothing to report.

D. System Status

1. Objectives

The collection of public use data is continuing, which will enable us to determine the amounts and types of uses occurring on the refuge. A re-evaluation of objective levels will be done as soon as adequate data is available.

2. Funding

Funds which had been planned to re-habilitate the access area in 1978 were diverted to a higher priority project again in 1980. Base funding is included under the Wapello district annual work plan.

II. CONSTRUCTION AND MAINTENANCE

A. Construction

Nothing to report.

B. Maintenance

Litter pickup and mowing of the public access area was accomplished during the year by YACC personnel. The levee approach and parking area received spot gravel and grading as needed. The pit toilet was pumped in the fall prior to freeze up.

C. Wildfire

Nothing to report.

III. HABITAT MANAGEMENT

A. Croplands

Corn was planted in early June on 25.7 acres in the Big Timber unit. A new cooperator farmed the area and was pleased with harvest results which averaged about 85 bushels per acres. The weather cooperated throughout the growing season to produce one of the best corn crops in years on the refuge.

B. Grasslands

Nothing to report

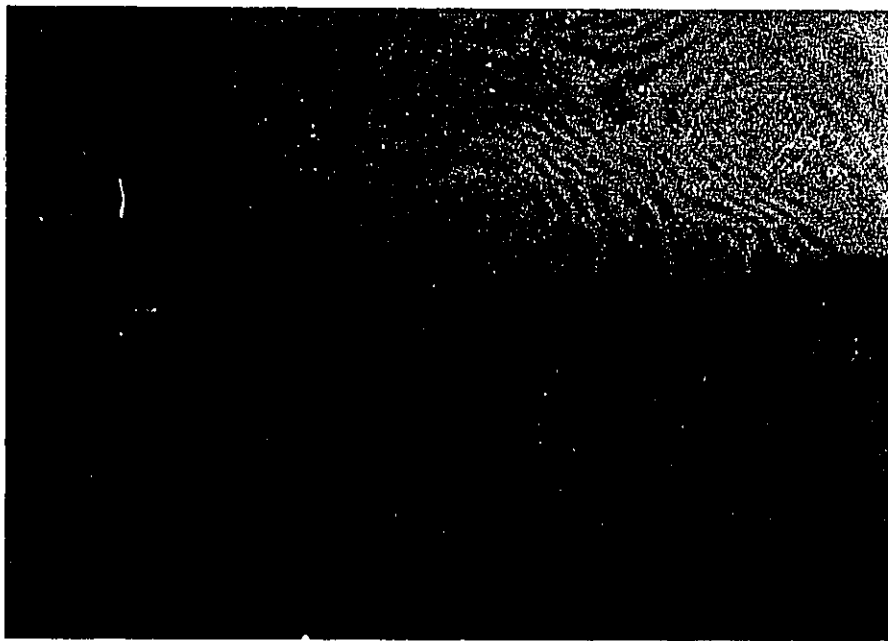
C. Wetlands

As stated earlier, good submergent aquatic growth was present in about 500 acres of water on the refuge. Rice Cutgrass and Wild Millet were prevalent in the ends of shallow bays and around the shoreline in some areas.

No water level management is possible on the area due to the river influence.

D. Forestlands

A timber resource inventory was completed by Corps of Engineer and Fish & Wildlife Service Foresters during the year. This inventory should give us a better idea of the timber resource on the area. Better timber management for the benefit of wildlife should result in the future.



River navigation affects many aspects of refuge management. Oil or chemical spills, bank erosion, dredging activities, etc. are but a few of the problems. The refuge units lying on the river side of the flood control levees are most affected by these activities. Refuge staff must constantly monitor these problems as they affect the river environment and the refuge lands.

E. Other Habitat

Nothing to report.

F. Wilderness and Special Areas

Not applicable.

IV. WILDLIFE

A. Endangered and/or Threatened Species

Bald Eagles are common on the refuge during the fall and spring. Winter use is sporadic depending on ice conditions in water areas. The annual mid-winter Bald Eagle count, sponsored by the National Wildlife Federation, was made by refuge personnel on January 12, 1980. A total of only one unidentified eagle was observed that day on the refuge. The peak number of eagles observed during the year was nine; six adult and three immature, on November 20th.

No Peregrine Falcons were observed on the area during the year. These birds use river corridor during migration periods. The infrequent trips to the area by refuge personnel during these periods could easily miss observing these birds on the refuge.

Ospreys use the clear water areas in the interior of the refuge to feed on fish. As many as four individuals were observed in early April on the area.

B. Migratory Birds

1. Waterfowl

All waterfowl use data, except for Wood Ducks, during the fall and spring migration is obtained from Illinois Natural History Survey Aerial Census. The terrain of this refuge does not allow accurate ground censusing of most wildlife species.

The duck use day total was 409,165 use days. This is a decrease from the 1979 total of 487,074 use days. Wood Ducks did not remain on the area as long in the fall as they did in 1979, which resulted in slightly lower use day totals.

Goose use was up over the 1979 use day total. The total goose use days for 1980 were 29,880. Table I summarizes duck use days and fall peaks.

TABLE I
Duck Use Days and Fall Peaks
Big Timber Division (1966-1980)

<u>Calendar Year</u>	<u>Total Use Days</u>	<u>Peak Numbers</u>
1966	250,320	6,315
1967	163,349	2,835
1968	174,859	2,290
1969	132,910	2,045
1970	241,675	4,000
1971	242,125	6,200
1972	224,444	5,600
1973	118,150	3,300
1974	144,885	1,480
1975	146,767	2,050
1976	166,836	1,970
1977	176,130	2,300
1978	180,788	3,764
1979	487,074	1,860
1980	<u>409,165</u>	<u>8,025</u>
Average	217,298	3,602

Revised

2. Marsh and Water Birds

Green Herons, Great Blue Herons, Great Egrets, and Black-crowned Night Herons were observed on the area during the year. No unusual sightings or concentrations were observed during the year.

3. Shorebirds, Gulls, Terns, and Allied Species

Spotted Sandpipers and Killdeer were the major species observed on the refuge during 1980. Common Snipe and American Woodcock were present during the spring and fall as they migrated through the area. No unusual sightings or concentrations were noticed during the year. Ring-billed Gulls were present in April and early May. A peak of 250 were recorded in September. Herring Gulls usually peak in the spring. 165 of these birds were observed in late March.

4. Raptors

Migrating Broad-winged Hawks, Cooper's Hawks, and Sharp-shinned Hawks used the timbered refuge for resting and feeding during their fall migration in late September and early October. Two Red-Shouldered Hawks were observed on the area in October. The three species of owls; Screech, Great Horned, and Barred were heard or seen during the year. No unusual sightings or concentrations were noticed during 1980.

5. Other Migratory Birds

Nothing significant or unusual to report.

C. Mammals and Non-Migratory Birds and Other

1. Game Animals

Since no flooding occurred on the area during the year, the number of White-tailed Deer increased over 1979. A herd of fifteen to twenty individuals were using the area in November. A good mast crop benefitted many species of wildlife. Gray and Fox Squirrels were common throughout the refuge. During hunter checks in the fall the bag was evenly mixed between Gray and Fox Squirrel.

2. Other Mammals

Nothing significant or unusual to report.

3. Resident Birds

No ground dwelling birds were observed on the refuge during the year. Due to frequent and prolonged flooding on this island refuge, no stable populations of ground dwelling birds can exist.

4. Other Animal Life

Nothing unusual to report.

V. INTERPRETATION AND RECREATION

A. Information and Interpretation

Nothing to report.

B. Recreation

1. Wildlife Oriented

Periodic public use surveys were performed periodically by the Biological Aide to determine the amounts and types of uses on the area. Fishing is the number one form of recreation followed by hunting and hiking. Fishing accounting for over 90% of the 127,306 activity hours under recreation during the year. This is an increase of 68,078 activity hours over 1979. 1980 was a good year for outdoor activities which was the main factor for the increase. Table II is a comparison with 1979 uses and activity hours.

TABLE II

<u>Activity</u>	<u>1980 Activity Hours %</u>		<u>1979 Activity Hours %</u>	
Interpretation	0	0	0	0
Recreation	127,306	98.6	59,228	99
W/W Observation	1,740	1.4	897	1
Total	129,046	100%	60,125	100%

2. Non-Wildlife Oriented

Nothing to report.

C. Enforcement

A few cases were made on the refuge for vehicle trespass during the year. More time needs to be directed to law enforcement activities on this area, but due to manpower limitations, no additional effort is planned for 1981.

VI. OTHER ITEMS

A. Field Investigations

Nothing to report.

B. Cooperative Program

Refer to Louisa Division report.

C. Items of Interest

See Louisa Division report.

D. Safety

See Louisa Division report.